Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	OCT 23	The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded
NEWS	4	OCT 30	CHEMLIST enhanced with new search and display field
NEWS	5	NOV 03	JAPIO enhanced with IPC 8 features and functionality
NEWS	6	NOV 10	CA/CAplus F-Term thesaurus enhanced
NEWS	7	NOV 10	STN Express with Discover! free maintenance release Version 8.01c now available
NEWS	8	NOV 20	CAS Registry Number crossover limit increased to 300,000 in additional databases
NEWS	9	NOV 20	CA/CAplus to MARPAT accession number crossover limit increased to 50,000
NEWS	10	DEC 01	CAS REGISTRY updated with new ambiguity codes
NEWS	11	DEC 11	CAS REGISTRY chemical nomenclature enhanced
NEWS	12	DEC 14	WPIDS/WPINDEX/WPIX manual codes updated
NEWS	13	DEC 14	GBFULL and FRFULL enhanced with IPC 8 features and functionality
NEWS	14	DEC 18	CA/CAplus pre-1967 chemical substance index entries enhanced with preparation role
NEWS	15	DEC 18	CA/CAplus patent kind codes updated
NEWS	16	DEC 18	MARPAT to CA/CAplus accession number crossover limit increased to 50,000
NEWS	17	DEC 18	MEDLINE updated in preparation for 2007 reload
NEWS	18	DEC 27	CA/CAplus enhanced with more pre-1907 records
NEWS	19	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals

NEWS EXPRESS	NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8
NEWS X25	X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 10:18:19 ON 12 JAN 2007

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:18:58 ON 12 JAN 2007

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JAN 2007 HIGHEST RN 917345-85-8
DICTIONARY FILE UPDATES: 11 JAN 2007 HIGHEST RN 917345-85-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

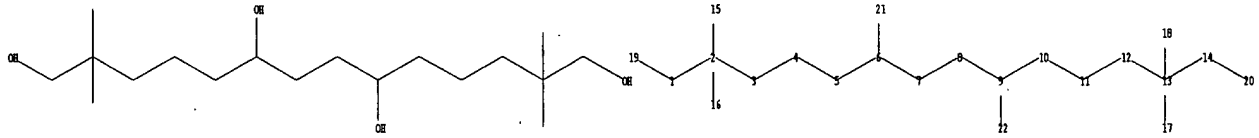
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10743109\10743109 elected species.str

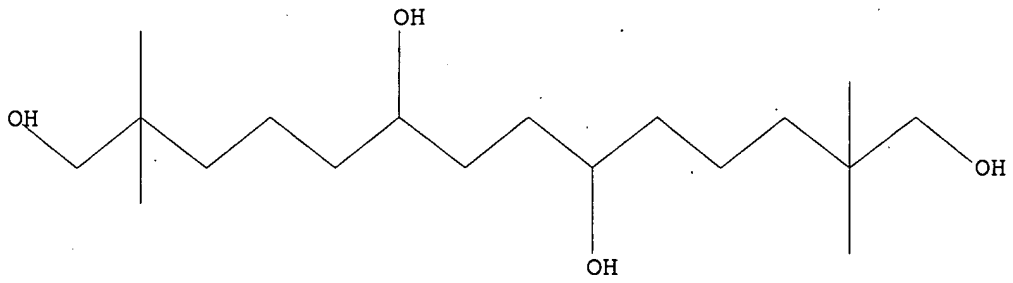


chain nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
chain bonds :
1-2 1-19 2-3 2-15 2-16 3-4 4-5 5-6 6-7 6-21 7-8 8-9 9-10 9-22 10-11
11-12 12-13 13-14 13-17 13-18 14-20
exact/norm bonds :
1-19 6-21 9-22 14-20
exact bonds :
1-2 2-3 2-15 2-16 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13
13-14 13-17 13-18

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS
18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS

```
L1      STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1                STR
```




```
Structure attributes must be viewed using STN Express query preparation.


=> search l1 exact sss
'EXACT' IS NOT VALID HERE
For additional help, enter "HELP SEARCH".

=> search l1 exact sam
SAMPLE SEARCH INITIATED 10:19:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        8 TO ITERATE

100.0% PROCESSED        8 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:             8 TO      329
PROJECTED ANSWERS:                0 TO        0

L2            0 SEA EXA SAM L1

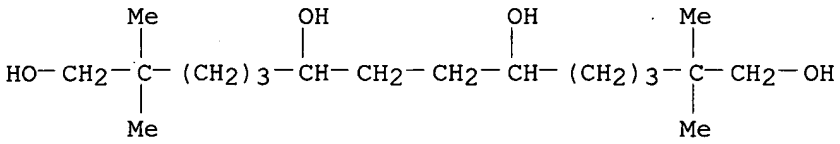
=> search l1 exact full
FULL SEARCH INITIATED 10:19:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      181 TO ITERATE

100.0% PROCESSED      181 ITERATIONS                                  1 ANSWERS
SEARCH TIME: 00.00.01

L3            1 SEA EXA FUL L1

=> d l3

L3   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2007 ACS on STN
RN   738606-82-1  REGISTRY
ED   Entered STN:  03 Sep 2004
CN   1,6,9,14-Tetradecanetetrol, 2,2,13,13-tetramethyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   2,2,13,13-Tetramethyltetradecane-1,6,9,14-tetraol
MF   C18 H38 O4
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	60.65	60.86

FILE 'CAPLUS' ENTERED AT 10:20:03 ON 12 JAN 2007
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FILE COVERS 1907 - 12 Jan 2007 VOL 146 ISS 4
FILE LAST UPDATED: 11 Jan 2007 (20070111/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> l3
L4 1 L3

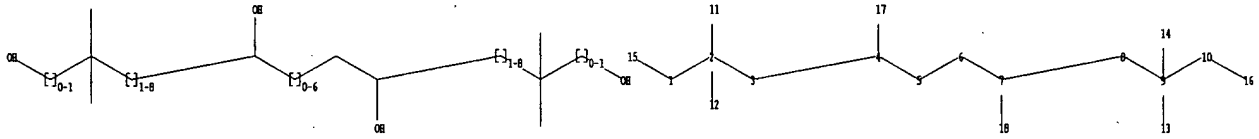
=> d l4

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:648491 CAPLUS
DN 141:190505
TI Preparation of hydroxyl compounds for cholesterol management and related uses
IN Dasseux, Jean-Louis Henri; Oniciu, Daniela Carmen
PA Esperion Therapeutics, Inc., USA
SO PCT Int. Appl., 348 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

```
PI   WO 2004067489        A2    20040812    WO 2003-US41411       20031223
     WO 2004067489        A3    20041125
     WO 2004067489        A8    20050217
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2513660           A1    20040812    CA 2003-2513660       20031223
     AU 2003299993        A1    20040823    AU 2003-299993        20031223
     US 2004209847        A1    20041021    US 2003-743287        20031223
     US 7119221           B2    20061010
     US 2004214887        A1    20041028    US 2003-743109        20031223
     US 2005043278        A1    20050224    US 2003-743470        20031223
     EP 1597223           A2    20051123    EP 2003-800258        20031223
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003018046        A     20051220    BR 2003-18046         20031223
     JP 2006513251        T     20060420    JP 2004-567452        20031223
     US 2006229281        A1    20061012    US 2006-426380        20060626
PRAI US 2003-441795P      P     20030123
     US 2003-743287       A3    20031223
     WO 2003-US41411      W     20031223
OS   MARPAT 141:190505


=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary
files\10743109\10743109 1st stab.str
```

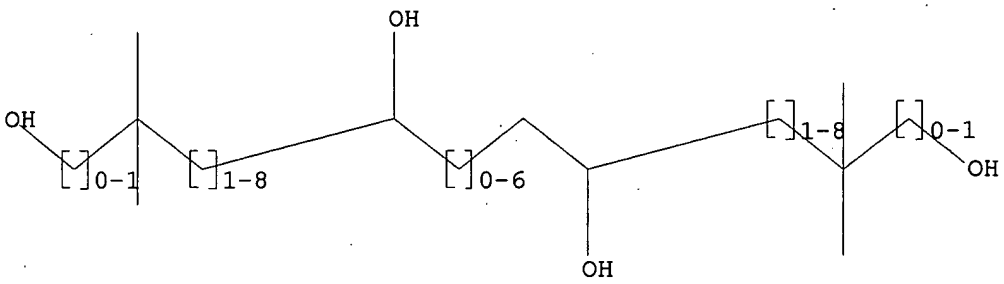


```
chain nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18
chain bonds :
1-2  1-15  2-3  2-11  2-12  3-4  4-17  4-5  5-6  6-7  7-18  7-8  8-9  9-10  9-13
9-14  10-16
exact/norm bonds :
1-15  4-17  7-18  10-16
exact bonds :
1-2  2-3  2-11  2-12  3-4  4-5  5-6  6-7  7-8  8-9  9-10  9-13  9-14

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS
10:CLASS  11:CLASS  12:CLASS  13:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS
18:CLASS


L5      STRUCTURE UPLOADED
```

=> d l5
L5 HAS NO ANSWERS
L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l5 sss sam
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 10:26:48 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 87083 TO ITERATE

2.3% PROCESSED 2000 ITERATIONS 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 1724128 TO 1759192
PROJECTED ANSWERS: 475 TO 1265

L6 1 SEA SSS SAM L5

L7 1 L6

=> d scan

L7 1 ANSWERS CAPLUS COPYRIGHT 2007 ACS on STN
IC D06M013-46
CC 39-10 (Textiles)
TI Water- and greaseproofing finishing of hydroxyl- and amine-containing fibrous materials
ST waterproofing oilproofing textile; perfluoropolymer oilproofing waterproofing textile; pyridinium fluoro waterproofing oilproofing textile
IT Pyridinium compounds
RL: USES (Uses)
(fluorinated, polymers, oilproofing waterproofing agents, for textiles)
IT Fluoropolymers
RL: USES (Uses)
(oilproofing waterproofing agents, for textiles)
IT Oilproofing

Waterproofing
(agents, fluorinated vinylpyridinium polymers as)
IT 77753-59-4 77753-61-8 77753-63-0 77753-65-2
RL: USES (Uses)
(oilproofing waterproofing agents, for textiles)

ALL ANSWERS HAVE BEEN SCANNED

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.47	68.13

FILE 'REGISTRY' ENTERED AT 10:27:14 ON 12 JAN 2007
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STRUCTURE FILE UPDATES: 11 JAN 2007 HIGHEST RN 917345-85-8
DICTIONARY FILE UPDATES: 11 JAN 2007 HIGHEST RN 917345-85-8

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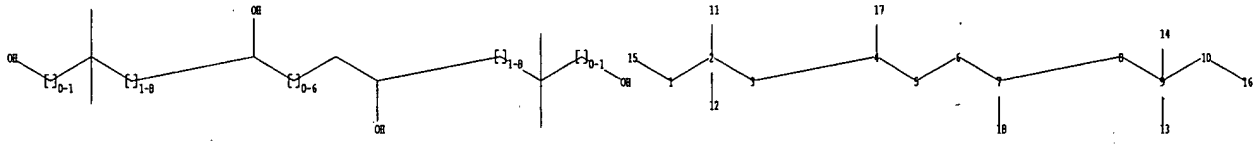
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10743109\10743109 1st stab.str



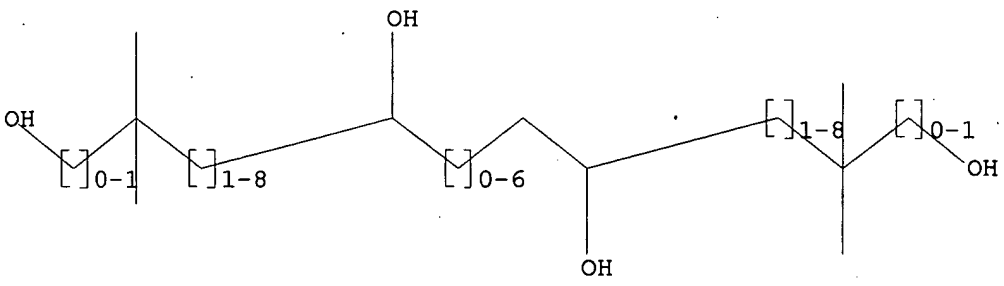
chain nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
1-2 1-15 2-3 2-11 2-12 3-4 4-17 4-5 5-6 6-7 7-18 7-8 8-9 9-10 9-13 9-14 10-16
exact/norm bonds :
1-15 4-17 7-18 10-16
exact bonds :
1-2 2-3 2-11 2-12 3-4 4-5 5-6 6-7 7-8 8-9 9-10 9-13 9-14

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS
18:CLASS

L8 STRUCTURE UPLOADED

=> d l8
L8 HAS NO ANSWERS
L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l8 sss sam
SAMPLE SEARCH INITIATED 10:27:47 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 87083 TO ITERATE

2.3% PROCESSED 2000 ITERATIONS 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

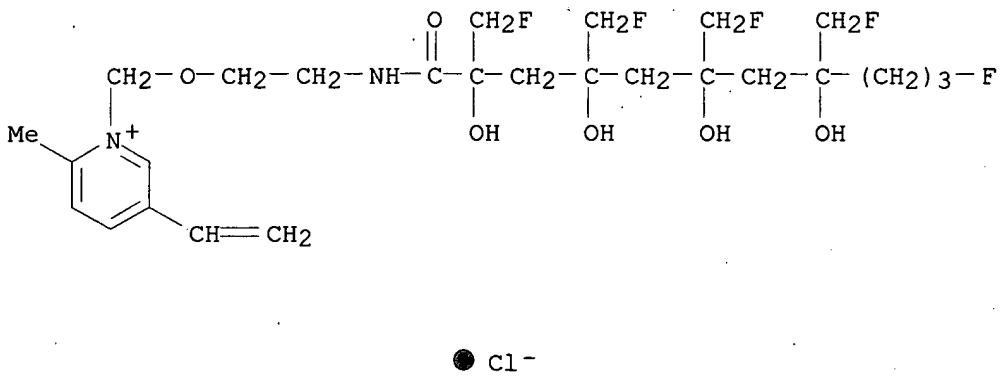
FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 1724128 TO 1759192
PROJECTED ANSWERS: 475 TO 1265

L9 1 SEA SSS SAM L8

=> d scan

L9 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Pyridinium, 5-ethenyl-1-[[2-[[11-fluoro-2,4,6,8-tetrakis(fluoromethyl)-2,4,6,8-tetrahydroxy-1-oxoundecyl]amino]ethoxy]methyl]-2-methyl-, chloride, homopolymer (9CI)
MF (C26 H40 F5 N2 O6 . Cl)x
CI PMS

CM 1



ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.35	69.48

FILE 'CAPLUS' ENTERED AT 10:29:07 ON 12 JAN 2007
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FILE COVERS 1907 - 12 Jan 2007 VOL 146 ISS 4
FILE LAST UPDATED: 11 Jan 2007 (20070111/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> tetraol
945 TETRAOL
197 TETRAOLS
L10 1094 TETRAOL
(TETRAOL OR TETRAOLS)

=> tetramethyl
52665 TETRAMETHYL
16 TETRAMETHYLS
L11 52670 TETRAMETHYL
(TETRAMETHYL OR TETRAMETHYLS)

=> l10(l)l11
L12 10 L10(L)L11

```
=> d ml12 1-10 ti
'ML12' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
```

to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end

=> d l12 1-10 ti

L12 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI p-Methyltetrahomodioxacalix[4]arene

L12 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI Colored thermographic media useful for bar codes for near-IR scanning

L12 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI High-molecular-weight piperidine derivatives as UV stabilizers

L12 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI Thiolation and silylation of 2,4,7,9-tetramethyl
-5-decyne-2',4',7',9'-tetraol

L12 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI 3,6-Di-tert-butylpyrocatechol-based cyclic acetals

L12 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI Poly(ol esters) of alkylated 4-hydroxybenzylphosphinic acids

L12 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI Polyurethane foams having improved air permeability

L12 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI Tertiary trihydric alcohols of the acetylene and ethylene series and their reactions. XXXI. Synthesis and hydrogenation of 2,3-dimethyl-4-octyne-2,3,6-triol and 2,3-dimethyl-4-nonyne-2,3,6-triol

L12 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI Acetylenic tertiary trihydric alcohols and their transformations. XXV. Mechanism of hydrogenation of polyhydroxy derivatives of acetylene

L12 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
TI Carotenoid syntheses. XXIX. Synthesis of isorenieratene

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	14.47	83.95

FILE 'REGISTRY' ENTERED AT 10:38:19 ON 12 JAN 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JAN 2007 HIGHEST RN 917345-85-8
DICTIONARY FILE UPDATES: 11 JAN 2007 HIGHEST RN 917345-85-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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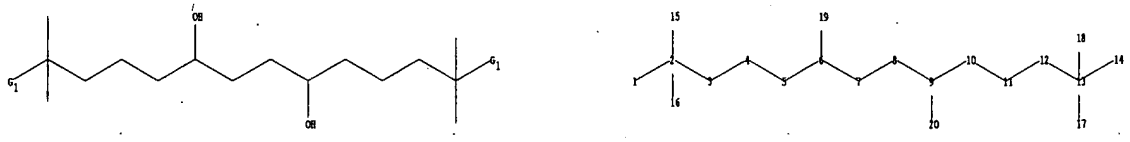
http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10743109\10743109 2nd stab.str



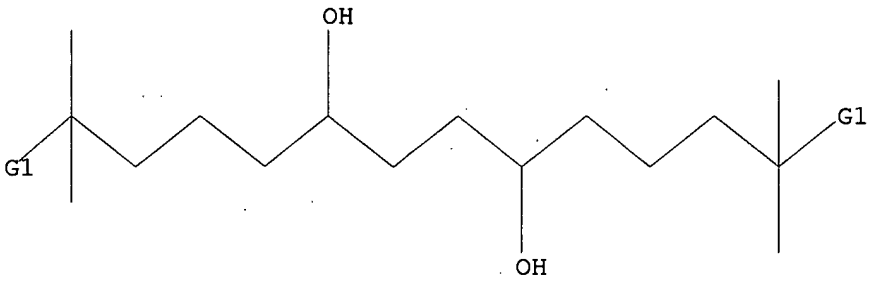
chain nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
chain bonds :
1-2 2-3 2-15 2-16 3-4 4-5 5-6 6-7 6-19 7-8 8-9 9-10 9-20 10-11 11-12 12-13 13-14 13-17 13-18
exact/norm bonds :
1-2 6-19 9-20 13-14
exact bonds :
2-3 2-15 2-16 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-17 13-18

G1:C,O

Hydrogen count :
15:>= minimum 3 16:>= minimum 3 17:>= minimum 3 18:>= minimum 3
Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS

L13 STRUCTURE UPLOADED

=> d l13
L13 HAS NO ANSWERS
L13 STR



G1 C,O

Structure attributes must be viewed using STN Express query preparation.

=> search l13 sss sam
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SAMPLE SCREEN SEARCH COMPLETED - 729 TO ITERATE

100.0% PROCESSED 729 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 12961 TO 16199
PROJECTED ANSWERS: 0 TO 0

L14 0 SEA SSS SAM L13

=> search l13 sss full
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FULL SCREEN SEARCH COMPLETED - 13742 TO ITERATE

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SEARCH TIME: 00.00.01

L15 2 SEA SSS FUL L13

=> d scan

L15 2 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
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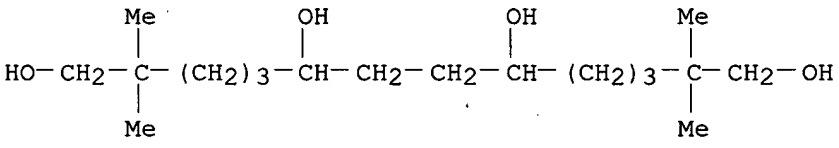
MF C18 H38 O4



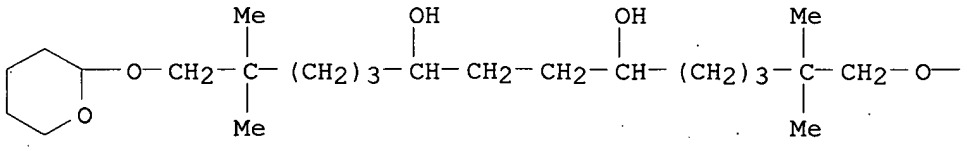
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L15 2 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 6,9-Tetradecanediol, 2,2,13,13-tetramethyl-1,14-bis[(tetrahydro-2H-pyran-2-

yl)oxy]- (9CI)
MF C28 H54 O6

PAGE 1-A



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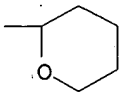

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.55	256.50

FILE 'CAPLUS' ENTERED AT 10:39:30 ON 12 JAN 2007
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FILE COVERS 1907 - 12 Jan 2007 VOL 146 ISS 4
FILE LAST UPDATED: 11 Jan 2007 (20070111/ED)

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=> l15
L16 4 L15

=> d l16 1-4 ti fbib abs

L16 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of acyclic and cyclic ethers for cholesterol management and related uses

AN 2005:673246 CAPLUS

DN 143:172758

TI Preparation of acyclic and cyclic ethers for cholesterol management and related uses

IN Basseux, Jean-Louis; Oniciu, Carmen Daniela

PA Esperion Therapeutics, Inc., USA

SO PCT Int. Appl., 334 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005068410	A1	20050728	WO 2003-US41611	20031224
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003300438	A1	20050803	AU 2003-300438	20031224
			WO 2003-US41611 A	20031224

OS MARPAT 143:172758

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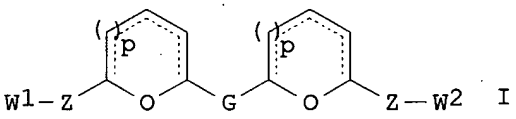

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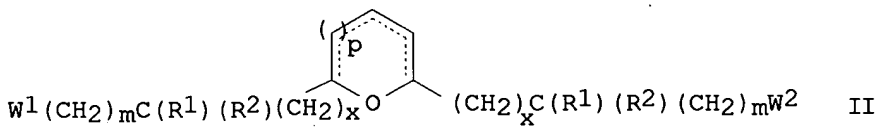

II

AB The present invention relates to novel ether compds. W1-Z-O-G-O-Z-W2 (I; variables defined below; e.g. 5-[6-(5-hydroxy-4,4-dimethylpentyl)tetrahydropyran-2-yl]-2,2-dimethylpentan-1-ol), cyclic mono- and bis-ethers (shown as II and III; variables defined in claims), compns. comprising ether compds., and methods useful for treating and preventing cardiovascular diseases, dyslipidemias, dyslipoproteinemias, and glucose metabolism disorders comprising administering a composition comprising an ether compound The compds., compns., and methods of the invention are also useful for treating and preventing Alzheimer's Disease, Syndrome X, peroxisome proliferator activated receptor-related disorders, septicemia, thrombotic disorders, obesity, pancreatitis, hypertension, renal disease, cancer, inflammation, and impotence. The effects of illustrative compds. of the invention on non-HDL cholesterol, HDL cholesterol, triglyceride levels, glycemic control indicators and body weight control in obese female Zucker rats and on the in vitro lipid synthesis in isolated hepatocytes

are tabulated. For I: Z = (CH2)m, (CH:CH)t, or phenyl; m, t = 1-9; G is (CH2)x, CH2CH:CHCH2, CH:CH, CH2-phenyl-CH2, or phenyl; x = 2-4; W1 and W2 = C(R1)(R2)(CH2)nY, V, C(R3)(R4)(CH2)cC(R5)(R6)(CH2)nY, or C(R1)(R2)(CH2)cV; c = 1-2; n = 0-4; R1, R2 = (C1-C6)alkyl, (C2-C6)alkenyl, (C2-C6)alkynyl, Ph, benzyl, or, R1 and R2 and the C to which they are both attached are taken together to form a (C3-C7)cycloalkyl group; R3, R4 = H, (C1-C6)alkyl, (C2-C6)alkenyl, (C2-C6) alkynyl, Ph, benzyl, or R3 and R4 and the C to which they are both attached are taken together to form a (C3-C7)cycloalkyl; R5 is H, (C1-C6)alkyl, (C2-C6)alkenyl, (C2-C6)alkynyl, (C1-C6)alkoxy, Ph, benzyl, Cl, Br, CN, NO2, or CF3. R6 is OH, (C1-C6)alkyl, (C2-C6)alkenyl, (C2-C6)alkynyl, (C1-C6)alkoxy, Ph, benzyl, Cl, Br, CN, NO2, or CF3; V is 2H-tetrahydropyran-2-yloxy, various lactonyl groups; Y = (C1-C6)alkyl, OH, COOH, CHO, COOR7, SO3H, etc.; R7 is (C1-C6)alkyl, (C2-C6)alkenyl, (C2-C6)alkynyl, Ph, or benzyl and is (un)substituted with ≥1 halo, OH, (C1-C6)alkoxy, or Ph groups; R8 = H, (C1-C6)alkyl, (C2-C6)alkenyl, or (C2-C6)alkynyl and is (un)substituted with one or two halo, OH, (C1-C6) alkoxy, or Ph groups; R9 = H, (C1-C6)alkyl, (C2-C6)alkenyl, or (C2-C6)alkynyl; addnl. details including provisos are given in the claims. Although the methods of preparation are not claimed, many example prepns., primarily of III and acyclic monoethers, are included. For example, bis(6-hydroxy-5,5-dimethylhexyl) ether was prepared on a kg-scale in 6 steps starting from Et isobutyrate and 1,4-dibromobutane with an overall yield of .apprx.20% producing a material of >98% purity.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of ethers for cholesterol management and related uses
AN 2004:802572 CAPLUS
DN 141:295623
TI Preparation of ethers for cholesterol management and related uses
IN Dasseux, Jean-Louis Henri; Oniciu, Carmen Daniela
PA USA
SO U.S. Pat. Appl. Publ., 149 pp., Cont.-in-part of U.S. Ser. No. 976,867.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	US 2004192771	A1	20040930	US 2003-743951		20031224
				US 2001-976867	A2	20011011
	US 2003018013	A1	20030123	US 2001-976867		20011011
	US 6713507	B2	20040330			
				US 2000-239482P	P	20001011

PATENT FAMILY INFORMATION:
FAN 2002:293588

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002030863	A2	20020418	WO 2001-US31873	20011011
	WO 2002030863	A3	20030731		

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US 2000-239482P P 20001011

CA 2425121	A1	20020418	CA 2001-2425121		20011011
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			WO 2001-US31873	W	20011011
AU 200213137	A	20020422	AU 2002-13137		20011011
			US 2000-239482P	P	20001011
			WO 2001-US31873	W	20011011
EP 1351916	A2	20031015	EP 2001-981500		20011011
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JP 2004529069	T	20040924	JP 2002-534253		20011011
			US 2000-239482P	P	20001011
			WO 2001-US31873	W	20011011
BR 2001014617	A	20051213	BR 2001-14617		20011011
			US 2000-239482P	P	20001011
			WO 2001-US31873	W	20011011

OS MARPAT 141:295623

AB Title compds., e.g. W1ZOGOZW2 [Z = (CH2)m, (CH:CH)t, phenylene; m, t = 1-9; G = (CH2)x, CH2CH:CHCH2, CH:CH, CH2-phenylene-CH2, phenylene; x = 2-4; W1, W2 = CR1R2(CH2)nY, V, CR3R4(CH2)cCR5R6(CH2)nY, CR1R2(CH2)cV; c = 1, 2; n = 0-4; R1, R2 = alkyl, alkenyl, alkynyl, Ph, PhCH2; R1R2C, R3R4C = atoms to form a cycloalkyl ring; R3, R4 = H, R1; R5 = H, alkyl, alkenyl, alkynyl, alkoxy, Ph, PhCH2, Cl, Br, cyano, NO2, CF3; R6 = OH, alkyl, alkenyl, alkynyl, alkoxy, Ph, PhCH2, Cl, Br, cyano, NO2, CF3; V = tetrahydropyran-2-yloxy, 2-oxooxetanyl, 2-oxotetrahydrofuryl, 2-oxotetrahydropyranyl, tetrazolyl, 3-hydroxyisoxazolyl, etc.], were prepared Thus, [HOCH2CMe2(CH2)3OCH2]2 (preparation given) at 30 mg/kg/day orally in obese female Zucker rats reduced serum triglycerides by 30% after 2 wk.

L16 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

TI Long Hydrocarbon Chain Ether Diols and Ether Diacids That Favorably Alter Lipid Disorders in Vivo

AN 2004:737064 CAPLUS

DN 141:388457

TI Long Hydrocarbon Chain Ether Diols and Ether Diacids That Favorably Alter Lipid Disorders in Vivo

AU Mueller, Ralf; Yang, Jing; Duan, Caiming; Pop, Emil; Zhang, Lian Hao; Huang, Tian-Bao; Denisenko, Anna; Denisko, Olga V.; Oniciu, Daniela C.; Bisgaier, Charles L.; Pape, Michael E.; Freiman, Catherine Delaney; Goetz, Brian; Cramer, Clay T.; Hopson, Krista L.; Dasseux, Jean-Louis H.

CS Alchem Laboratories Corporation, Alachua, FL, 32615, USA

SO Journal of Medicinal Chemistry (2004), 47(21), 5183-5197
CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 141:388457

AB Long hydrocarbon chain ethers with bis-terminal hydroxyl or carboxyl groups have been synthesized and evaluated for their potential to favorably alter lipid disorders including metabolic syndrome. Compds. were assessed for their effects on the de novo incorporation of radiolabeled acetate into lipids in primary cultures of rat hepatocytes as well as for their effects on lipid and glycemic variables in female obese Zucker fatty rats following 1 and 2 wk of daily oral administration. The most active compds. were found to be sym. with four to five methylene groups separating the central ether functionality and the gem di-Me or methyl/aryl substituents. Biol. activity was found to be greatest for tetramethyl-substituted ether diols, while bis(arylmethyl) derivs., diethers , and di-Ph ethers were the least active. For the most biol. active compound 28, we observed as much as a 346% increase in serum HDL-cholesterol and a 71% reduction in serum triglycerides at the highest dose

administered (100 mg/kg) after 2 wk of treatment. For one compound we observed a 69% reduction in non-HDL-cholesterol, accompanied by a 131% increase in HDL-cholesterol and an 84% reduction in serum triglycerides under the same treatment conditions.

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of hydroxyl compounds for cholesterol management and related uses
AN 2004:648491 CAPLUS
DN 141:190505
TI Preparation of hydroxyl compounds for cholesterol management and related uses
IN Dasseux, Jean-Louis Henri; Oniciu, Daniela Carmen
PA Esperion Therapeutics, Inc., USA
SO PCT Int. Appl., 348 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI WO 2004067489	A2	20040812	WO 2003-US41411		20031223
WO 2004067489	A3	20041125			
WO 2004067489	A8	20050217			
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
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AU 2003299993	A1	20040823	AU 2003-299993		20031223
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			WO 2003-US41411	W	20031223
US 2004209847	A1	20041021	US 2003-743287		20031223
US 7119221	B2	20061010			
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			US 2003-441795P	P	20030123
EP 1597223	A2	20051123	EP 2003-800258		20031223
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			WO 2003-US41411	W	20031223
BR 2003018046	A	20051220	BR 2003-18046		20031223
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JP 2006513251	T	20060420	JP 2004-567452		20031223
			US 2003-441795P	P	20030123
			WO 2003-US41411	W	20031223
US 2006229281	A1	20061012	US 2006-426380		20060626
			US 2003-441795P	P	20030123

US 2003-743287 A3 20031223

OS MARPAT 141:190505
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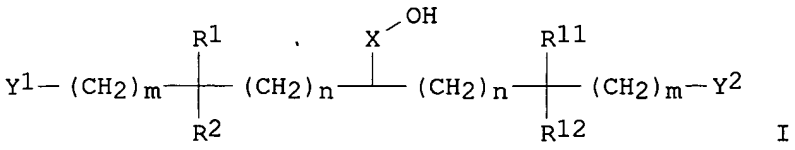

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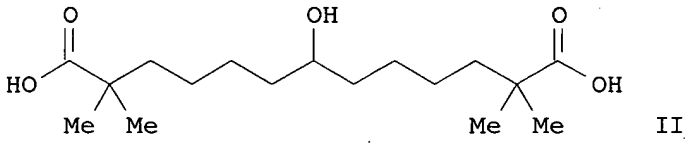

II

AB Title hydroxyalkanes I [wherein m = 0-5; n = 3-7; X = (CH2)p or CH2; p = 0-4; R1, R2, R11, R12 = independently H, alkyl, alkenyl, alkynyl, Ph, PhCH2, wherein R1, R2, R11, and R12 are not simultaneously H; Y1, Y2 = independently alkyl, OH, CO2H, CO2R3, SO3H, (un)substituted heterocyclyl, (di)phosphate and triphosphate esters, etc.; R3 = (un)substituted alkyl, alkenyl, alkynyl, Ph, PhCH2; and pharmaceutically acceptable salts, hydrates, solvates, or mixts. thereof] were prepared for cholesterol management. Thus, reduction of 7-oxo-2,2,12,12-tetramethyltridecanedioic acid di-Et ester with Na(BH4) in MeOH gave 7-hydroxy-2,2,12,12-tetramethyltridecanedioic acid di-Et ester (92%), which was saponified with KOH in EtOH to afford the diacid II (95%). The latter inhibited lipid synthesis in primary rat hepatocytes with IC50 of 3.4 μM. In addition, the present invention relates to I, compns. comprising I, and methods useful for treating and preventing a variety of diseases and conditions such as, but not limited to aging, Alzheimer's disease, cancer, cardiovascular disease, diabetic nephropathy, diabetic retinopathy, a disorder of glucose metabolism, dyslipidemia, dyslipoproteinemia, hypertension, impotence, inflammation, insulin resistance, lipid elimination in bile, obesity, oxysterol elimination in bile, pancreatitis, Parkinson's disease, a peroxisome proliferator activated receptor-associated disorder, phospholipid elimination in bile, renal disease, septicemia, metabolic syndrome disorders (e.g., Syndrome X), thrombotic disorder. Compds. and methods of the invention can also be used to modulate C reactive protein or enhance bile production in a patient (no data). In certain embodiments, I, compns. comprising I, and methods of the invention are useful in combination therapy with other therapeutics, such as hypocholesterolemic and hypoglycemic agents.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	18.74	275.24

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.12	-3.12

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FILE 'CAPLUS' ENTERED AT 10:48:20 ON 12 JAN 2007
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                    -3.12      -3.12

=> file reg
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FULL ESTIMATED COST                                    19.21     275.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                    -3.12      -3.12

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DICTIONARY FILE UPDATES:  11 JAN 2007  HIGHEST RN 917345-85-8

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http://www.cas.org/ONLINE/UG/regprops.html

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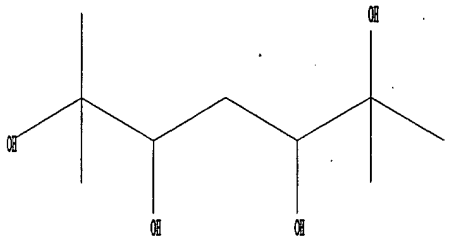

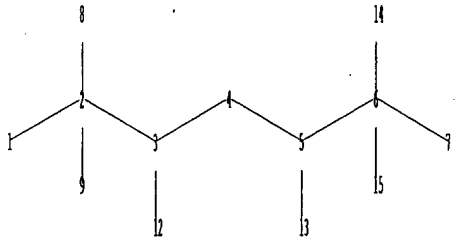

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G1:C,O

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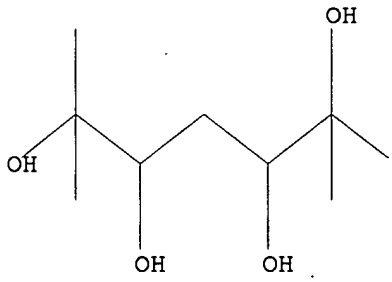
8:>= minimum 3 9:>= minimum 3
Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS

L17 STRUCTURE UPLOADED

=> d l17
L17 HAS NO ANSWERS
L17 STR



G1 C,O

Structure attributes must be viewed using STN Express query preparation.

=> search l17 sss sam
SAMPLE SEARCH INITIATED 10:48:56 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 191 TO ITERATE

100.0% PROCESSED 191 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

```
PROJECTED ITERATIONS:         2991 TO     4649
PROJECTED ANSWERS:               0 TO        0

L18            0 SEA SSS SAM L17

=> search l17 exact full
FULL SEARCH INITIATED 10:49:19 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -       24 TO ITERATE

100.0% PROCESSED       24 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

L19            0 SEA EXA FUL L17

=> search l17 exact fulllogoff hold
COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID
The query entered contains both search terms created by
structure-building or screen commands and text search terms.  L#s
created via the STRUCTURE or SCREEN commands must be searched in the
structures files separately from text terms or profiles.  The L#
answer sets from structure searches can be used in crossover searches
and can be combined with text terms.

=> logoff hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   58.70     334.41

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                    0.00      -3.12

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:49:56 ON 12 JAN 2007

Connecting via Winsock to STN



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LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2          "Ask CAS" for self-help around the clock
 NEWS  3  OCT 23  The Derwent World Patents Index suite of databases on STN
                  has been enhanced and reloaded
 NEWS  4  OCT 30  CHEMLIST enhanced with new search and display field
 NEWS  5  NOV 03  JAPIO enhanced with IPC 8 features and functionality
 NEWS  6  NOV 10  CA/CAplus F-Term thesaurus enhanced
 NEWS  7  NOV 10  STN Express with Discover! free maintenance release Version
                  8.01c now available
 NEWS  8  NOV 20  CAS Registry Number crossover limit increased to 300,000 in
                  additional databases
 NEWS  9  NOV 20  CA/CAplus to MARPAT accession number crossover limit increased
                  to 50,000
```

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NEWS 10   DEC 01  CAS REGISTRY updated with new ambiguity codes
NEWS 11   DEC 11  CAS REGISTRY chemical nomenclature enhanced
NEWS 12   DEC 14  WPIDS/WPINDEX/WPIX manual codes updated
NEWS 13   DEC 14  GBFULL and FRFULL enhanced with IPC 8 features and
                  functionality
NEWS 14   DEC 18  CA/CAplus pre-1967 chemical substance index entries enhanced
                  with preparation role
NEWS 15   DEC 18  CA/CAplus patent kind codes updated
NEWS 16   DEC 18  MARPAT to CA/CAplus accession number crossover limit increased
                  to 50,000
NEWS 17   DEC 18  MEDLINE updated in preparation for 2007 reload
NEWS 18   DEC 27  CA/CAplus enhanced with more pre-1907 records
NEWS 19   JAN 08  CHEMLIST enhanced with New Zealand Inventory of Chemicals

NEWS EXPRESS  NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS HOURS    STN Operating Hours Plus Help Desk Availability
NEWS LOGIN    Welcome Banner and News Items
NEWS IPC8     For general information regarding STN implementation of IPC 8
NEWS X25      X.25 communication option no longer available

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* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 09:22:37 ON 16 JAN 2007

=> file reg
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 0.21       0.21

FILE 'REGISTRY' ENTERED AT 09:22:42 ON 16 JAN 2007
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STRUCTURE FILE UPDATES:   15 JAN 2007  HIGHEST RN 917470-98-5
DICTIONARY FILE UPDATES:  15 JAN 2007  HIGHEST RN 917470-98-5

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

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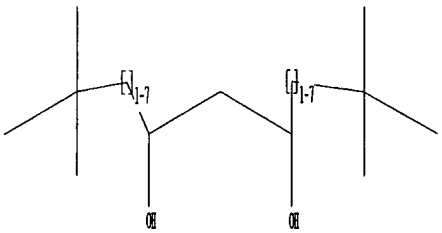
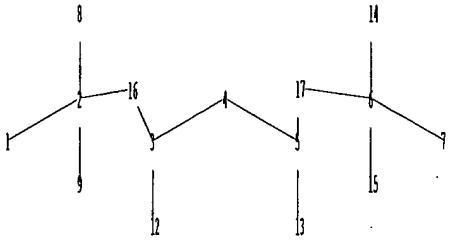
REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:
```

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10743109\10743109 4th stab.str





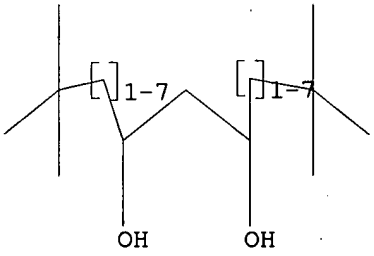
chain nodes :
1 2 3 4 5 6 7 8 9 12 13 14 15 16 17
chain bonds :
1-2 2-9 2-8 2-16 3-12 3-4 3-16 4-5 5-13 5-17 6-15 6-7 6-14 6-17
exact/norm bonds :
3-12 5-13
exact bonds :
1-2 2-9 2-8 2-16 3-4 3-16 4-5 5-17 6-15 6-7 6-14 6-17

G1:C,O

Hydrogen count :
8:>= minimum 3 9:>= minimum 3
Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 C,O

Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam
SAMPLE SEARCH INITIATED 09:23:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1072 TO ITERATE

100.0% PROCESSED 1072 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

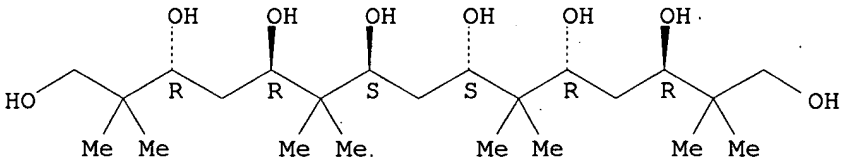
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 19476 TO 23404
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> d scan

L2 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,3,5,7,9,11,13,15-Pentadecaneoctol, 2,2,6,6,10,10,14,14-octamethyl-, (3R,5R,7S,9S,11R,13R)-rel- (9CI)
MF C23 H48 O8

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> search l1 sss full
FULL SEARCH INITIATED 09:23:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 20792 TO ITERATE

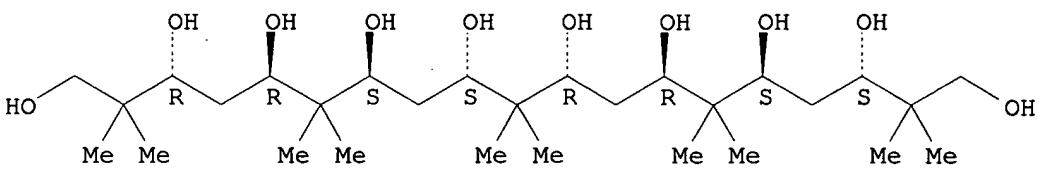
100.0% PROCESSED 20792 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

L3 4 SEA SSS FUL L1

=> d scan

L3 4 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,3,5,7,9,11,13,15,17,19-Nonadecanedecol, 2,2,6,6,10,10,14,14,18,18-decamethyl-, (3R,5R,7S,9S,11R,13R,15S,17S)-rel- (9CI)
MF C29 H60 O10

Relative stereochemistry.

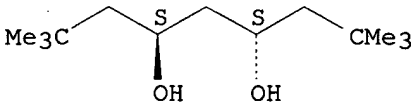


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L3 4 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4,6-Nonanediol, 2,2,8,8-tetramethyl-, [S-(R*,R*)]- (9CI)
MF C13 H28 O2

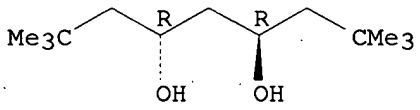
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 4 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4,6-Nonanediol, 2,2,8,8-tetramethyl-, (4R,6R)-rel- (9CI)
MF C13 H28 O2

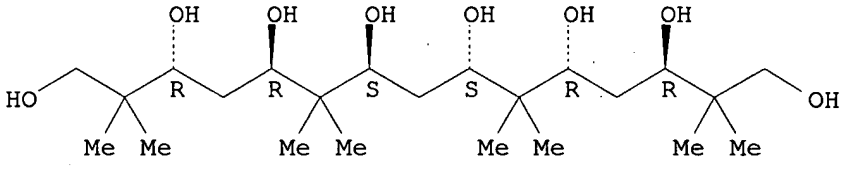
Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 4 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,3,5,7,9,11,13,15-Pentadecaneoctol, 2,2,6,6,10,10,14,14-octamethyl-, (3R,5R,7S,9S,11R,13R)-rel- (9CI)
MF C23 H48 O8

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 173.90 174.11

FILE 'CAPLUS' ENTERED AT 09:25:36 ON 16 JAN 2007
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FILE COVERS 1907 - 16 Jan 2007 VOL 146 ISS 4
FILE LAST UPDATED: 15 Jan 2007 (20070115/ED)

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=> l3
L4 4 L3

=> d l4 1-4 ti fbib abs it

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
TI Flexible molecules with defined shape, XVII. Conformational analysis of oligo-1,3-dioxanylmethanes
AN 2002:283973 CAPLUS
DN 137:169092
TI Flexible molecules with defined shape, XVII. Conformational analysis of oligo-1,3-dioxanylmethanes
AU Trieselmann, Thomas; Hoffmann, Reinhard W.; Menzel, Karsten
CS Fachbereich Chemie der Philipps-Univ., Marburg, 35032, Germany
SO European Journal of Organic Chemistry (2002), (7), 1292-1304
CODEN: EJOCFK; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
OS CASREACT 137:169092
AB Stereoselective synthesis of a series of 1,3-dioxan-4-ylmethanes has been achieved by use of solely substrate-based asym. induction. The simple C2-sym. bis(dioxan-4-yl)methane has a greater than 99% preference at the two inter-ring bonds for a diamond lattice conformation that avoids syn-pentane interactions. The homologous structures contain up to five dioxanylmethane units, maintaining a high conformational preference in each of the bis(dioxanyl)methane units. Thus, these flexible compds. reach a conformational preference in excess of 90% over up to eight rotatable interring bonds.
IT Molecular mechanics
Nuclear spin-spin coupling
(in conformational anal.; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)
IT Heterocyclic compounds
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(oxygen; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym.

induction involving aldol and reduction reactions and their conformational anal.)

IT Conformation
Conformational potential
(preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT Acetals
Oligomers
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT Aldol condensation
(stereoselective, Mukaiyama; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT Aldol condensation
(stereoselective, Paterson/Evans; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT Reduction
(stereoselective; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT Asymmetric synthesis and induction
(substrate-based; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 268750-30-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(Grignard; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 77-76-9, 2,2-Dimethoxypropane 116-11-0 1125-88-8, Benzaldehyde dimethyl acetal 2403-58-9, p-Methoxybenzaldehyde diethyl acetal
RL: RCT (Reactant); RACT (Reactant or reagent)
(acetalization; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 268750-34-1P 268750-49-8P 446264-34-2P 446264-35-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(acetalization; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 36140-19-9, Chlorodicyclohexylborane
RL: RGT (Reagent); RACT (Reactant or reagent)
(aldol reagent; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 17510-44-0, 3-Methyl-2-(trimethylsilyloxy)-2-butene 31469-16-6, 1-Ethoxy-2-methyl-1-(trimethylsilyloxy)propene 38216-93-2, 3-Benzyloxy-2,2-dimethylpropanal
RL: RCT (Reactant); RACT (Reactant or reagent)
(aldol; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 92156-87-1P, 3-(4-Methoxybenzyloxy)-2,2-dimethylpropanal 268750-31-8P 268750-39-6P 268750-44-3P 268750-46-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(aldol; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 107-05-1, Allyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(allylation; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 446264-32-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(benzylation and acetalization; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 268750-35-2P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(benzylation; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 126-30-7, 2,2-Dimethyl-1,3-propanediol 2746-25-0, 4-Methoxybenzyl bromide
RL: RCT (Reactant); RACT (Reactant or reagent)
(benzylation; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 185549-53-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(building block; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 268750-42-1P 268750-50-1P 268750-51-2P 446264-26-2P 446264-27-3P 446264-28-4P 446264-29-5P 446264-30-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(conformation; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 268750-41-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(deprotection/acetalization; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 268750-33-0P 268750-48-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(deprotection; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 1185-34-8, Dimethylmalondialdehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(double allylation; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)

IT 268750-36-3P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(oxidation; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym.
induction involving aldol and reduction reactions and their conformational anal.)

IT 446264-31-9P 446264-36-4P, 3-(4-Methoxybenzyloxy)-2,2-dimethyl-1-propanol

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(oxidation; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym.
induction involving aldol and reduction reactions and their conformational anal.)
IT 81927-55-1, Benzyl trichloroacetimidate
RL: RCT (Reactant); RACT (Reactant or reagent)
(ozonolysis; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)
IT 268750-29-4P 268750-38-5P 268750-43-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(ozonolysis; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)
IT 446276-96-6P
RL: BYP (Byproduct); PUR (Purification or recovery); PREP (Preparation)
(preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)
IT 268750-45-4P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(protection; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)
IT 446264-33-1P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reduction; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym.
induction involving aldol and reduction reactions and their conformational anal.)
IT 268750-32-9P 268750-37-4P 268750-40-9P 268750-47-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reduction; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym.
induction involving aldol and reduction reactions and their conformational anal.)
IT 89238-99-3P, 4-Methoxybenzyl trichloroacetimidate 268750-28-3P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(transacetalization, conformation; preparation of oligo-1,3-dioxanylmethanes by substrate-based asym. induction involving aldol and reduction reactions and their conformational anal.)
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
TI Stereoselective Synthesis of Skipped Polyols by Substrate-Directed Asymmetric Induction
AN 2000:216508 CAPLUS
DN 132:347532
TI Stereoselective Synthesis of Skipped Polyols by Substrate-Directed Asymmetric Induction
AU Trieselmann, Thomas; Hoffmann, Reinhard W.
CS Fachbereich Chemie, Philipps-Universitaet, Marburg, D-35032, Germany
SO Organic Letters (2000), 2(9), 1209-1212
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society

DT Journal
LA English
OS CASREACT 132:347532
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A series of C2- or σ-sym. oligo-1,3-dioxanylmethanes such as I have been prepared using a bidirectional approach. In bidirectional syntheses of meso compds., only substrate-based asym. induction could be applied. 1,3-Asym. induction in Mukaiyama-aldol addns., 1,5-asym. induction in enol-borinate aldol reactions, and 1,3-anti-selective reduction of aldols turned out to be reliable tools in the preparation of oligo-1,3-dioxanylmethanes. E.g., 2,2-dimethylmalonaldehyde was allylated with allyl chloride and tin (II) chloride to give a mixture of stereoisomeric dimethylnonanediols H2C:CHCH2CH(OH)CMe2CH(OH)CH2CH:CH2; treatment of the methylnonanediol with 4-methoxybenzaldehyde diethylacetal, ozonolysis, addition of methylmagnesium chloride, Swern oxidation of the intermediate alc., and bis-p-methoxybenzylation gives a diketone diol II (R = 4-MeOC6H4; PMB = 4-MeOC6H4CH2) in five steps from dimethylmalonaldehyde. E.g., treatment of II with dicyclohexylboron chloride and triethylamine at 0°, followed by addition of 4-MeOC6H4CH2OCH2CMe2CHO in di-Et ether at -90° gave an aldol adduct in 72% yield which underwent reduction with tetrabutylammonium triacetoxyborohydride to give tetraol III (R = 4-MeOC6H4; PMB = 4-MeOC6H4CH2) in 96% yield. E.g., reductive cleavage of the p-methoxybenzyl groups and acetalization with 2-methoxypropene gave I.

IT Alcohols, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(polyhydric; stereoselective preparation of C2- and σ-sym. oligodioxanylmethanes and of their skipped polyol precursors by substrate-based asym. induction)

IT Asymmetric synthesis and induction
(stereoselective preparation of C2- and σ-sym. oligodioxanylmethanes and of their skipped polyol precursors by substrate-based asym. induction)

IT Addition reaction
(stereoselective, aldol; stereoselective preparation of C2- and σ-sym. oligodioxanylmethanes and of their skipped polyol precursors by substrate-based asym. induction)

IT Aldol condensation
Reduction
(stereoselective; stereoselective preparation of C2- and σ-sym. oligodioxanylmethanes and of their skipped polyol precursors by substrate-based asym. induction)

IT 77-76-9, Acetone dimethyl acetal 107-05-1, Allyl chloride 116-11-0 542-78-9, Malondialdehyde 870-63-3, 3,3-Dimethylallyl bromide 1185-34-8 2403-58-9, 4-Methoxybenzaldehyde diethyl acetal 17510-44-0 31469-16-6 38216-93-2 89238-99-3 92156-87-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective preparation of C2- and σ-sym. oligodioxanylmethanes and of their skipped polyol precursors by substrate-based asym. induction)

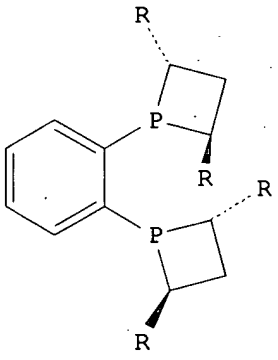
IT 67213-32-5P 67213-33-6P 185549-53-5P 268750-29-4P 268750-30-7P 268750-31-8P 268750-32-9P 268750-33-0P 268750-34-1P 268750-35-2P 268750-36-3P 268750-37-4P 268750-38-5P 268750-39-6P 268750-40-9P 268750-41-0P 268750-43-2P 268750-44-3P 268750-45-4P 268750-46-5P 268750-47-6P 268750-48-7P 268750-49-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(stereoselective preparation of C2- and σ-sym. oligodioxanylmethanes and of their skipped polyol precursors by substrate-based asym. induction)

IT 268750-28-3P 268750-42-1P 268750-50-1P 268750-51-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective preparation of C2- and σ-sym. oligodioxanylmethanes and of their skipped polyol precursors by substrate-based asym. induction)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
TI Additional data on the synthesis and properties of chiral 1,2-bis(phosphetano)benzenes
AN 2000:52123 CAPLUS
DN 132:180702
TI Additional data on the synthesis and properties of chiral 1,2-bis(phosphetano)benzenes
AU Marinetti, Angela; Jus, Sebastien; Genet, Jean-Pierre; Ricard, Louis
CS Laboratoire de Synthese Selective Organique et Produits Naturels, UMR CNRS 7573, E.N.S.C.P.-11, Paris, 75231, Fr.
SO Tetrahedron (1999), Volume Date 2000, 56(1), 95-100
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 132:180702
GI



I

AB The synthesis of chiral, C2-sym. 1,2-bis(phosphetano)benzenes 2 (shown as I; R = CHMe2, Me, CH2Ph) was extended to the benzyl-substituted derivative 2c (R = CH2Ph). Stable Ru and Pd complexes containing these ligands were isolated. X-ray diffraction studies were performed on the monoborane adduct of 2a (R = CHMe2) and on a Pd(II) complex of 2b (R = Me). Ligands 2 were effective as chiral ligands on ruthenium catalysts for stereoselective hydrogenation of β-keto esters, affording up to 90% ee.

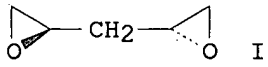
IT Esters, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(keto, β-; stereoselective hydrogenation of keto esters in presence of chiral ruthenium catalysts with bis(phosphetano)benzene ligands)

IT Crystal structure
Molecular structure
(of chiral bis(phosphetano)benzene monoborane adduct and palladium

complex)
IT Hydrogenation catalysts
(stereoselective; ruthenium with chiral bis(phosphetano)benzene ligands)
IT 225234-53-7
RL: PRP (Properties)
(crystal structure of)
IT 259228-97-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(crystal structure; preparation of chiral bis(phosphetano)benzene palladium derivs.)
IT 135943-84-9P 223390-88-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and conversion to cyclic sulfate)
IT 80510-04-9, 1,2-Bis(phosphino)benzene 190671-78-4 224619-88-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of chiral bis(phosphetano)benzene derivs.)
IT 224057-16-3P 259228-88-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chiral bis(phosphetano)benzene derivs.)
IT 259228-90-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of chiral bis(phosphetano)benzene derivs.)
IT 259228-96-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of chiral bis(phosphetano)benzene palladium derivs.)
IT 259228-93-8P 259228-95-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of chiral bis(phosphetano)benzene ruthenium derivs.)
IT 14220-64-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of palladium complexes containing chiral bis(phosphetano)benzene ligands)
IT 52462-29-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of ruthenium complexes containing chiral bis(phosphetano)benzene ligands)
IT 259228-89-2P
RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(stereoselective hydrogenation catalyst ligand; preparation of chiral bis(phosphetano)benzene derivs.)
IT 12289-94-0 76189-55-4
RL: CAT (Catalyst use); USES (Uses)
(stereoselective hydrogenation of diketones)
IT 1118-71-4 17575-03-0 51307-04-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective hydrogenation of diketones)
IT 259228-91-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective hydrogenation of diketones)
IT 224619-92-5
RL: CAT (Catalyst use); USES (Uses)
(stereoselective hydrogenation of keto esters in presence of chiral ruthenium catalysts with bis(phosphetano)benzene ligands)
IT 94-02-0 105-45-3 7152-15-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective hydrogenation of keto esters in presence of chiral ruthenium catalysts with bis(phosphetano)benzene ligands)

IT 3976-69-0P 33401-74-0P 95614-85-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective hydrogenation of keto esters in presence of chiral ruthenium catalysts with bis(phosphetano)benzene ligands)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
TI Optically pure 1,3-diols from (2R,4R)- and (2S,4S)-1,2:4,5-diepoxypentane
AN 1991:558456 CAPLUS
DN 115:158456
TI Optically pure 1,3-diols from (2R,4R)- and (2S,4S)-1,2:4,5-diepoxypentane
AU Rychnovsky, Scott D.; Griesgraber, George; Zeller, Sam; Skalitzky, Donald J.
CS Dep. Chem., Univ. Minnesota, Minneapolis, MN, 55455, USA
SO Journal of Organic Chemistry (1991), 56(17), 5161-9
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 115:158456
GI



I

AB Optically pure (>97% ee) (2R,4R)-1,2:4,5-diepoxypentane (I) and its enantiomer are prepared in 3 steps from (MeCO)2CH2 without the need for chromatog. purification Diepoxide I is an efficient precursor to a wide variety of optically pure syn- and anti-1,3-diols. Reaction with excess nucleophile gives sym. anti-1,3-diols in good yield. Reaction with a slight excess of alkyllithium under Ganem's conditions gives the monoexpoxides in good yield; addition of a 2nd nucleophile then gives asym. anti 1,3-diols. Mitsunobu inversion of the monoepoxide followed by addition of a 2nd nucleophile gives syn-1,3-diols.
IT Glycols, preparation
RL: RCT (Reactant); RACT (Reactant or reagent)
(1,3-, stereoselective synthesis of, by ring cleavage of diepoxypentanes)
IT Ring cleavage
(stereoselective, of optically pure diepoxypentanes, diols by)
IT 103745-89-7 109361-17-3
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for stereoselective hydrogenation of dichloropentanedione)
IT 67-64-1, Acetone, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation reaction of, with dibromopentanediol, dioxane derivative by)
IT 40630-12-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydrogenation of, stereoselective catalytic)
IT 135943-96-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and acidification of)
IT 135943-79-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and benzoylation of)
IT 135943-82-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclocondensation reaction of, with acetone)
IT 136030-28-9P 136030-29-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and dehydrochlorination of, diepoxypentane by)
IT 135943-81-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ozonolysis of, in synthesis of hydroxyphenethyltetrahydropyranone)
IT 109905-51-3P 131563-81-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ring cleavage of, with electrophiles, stereoselective)
IT 135943-80-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ring cleavage of, with vinyllithium)
IT 86117-01-3P 103729-39-1P 129212-21-1P 130275-04-6P 130481-49-1P
135943-83-8P 135943-84-9P 135943-85-0P 135943-86-1P
135943-87-2P 135943-88-3P 135943-89-4P 135943-90-7P 135943-91-8P
135943-92-9P 135943-93-0P 135943-94-1P 135943-95-2P 135972-36-0P
136030-30-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 123-54-6, 2,4-Pentanedione, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloroacetyl chloride)
IT 79-04-9, Chloroacetyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with pentanedione)

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	14.09	188.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.12	-3.12

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 09:27:34 ON 16 JAN 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 09:55:17 ON 16 JAN 2007
FILE 'CAPLUS' ENTERED AT 09:55:17 ON 16 JAN 2007

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	14.09	188.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.12	-3.12

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	14.56	188.67

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.12	-3.12

FILE 'REGISTRY' ENTERED AT 09:55:35 ON 16 JAN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 15 JAN 2007 HIGHEST RN 917470-98-5
DICTIONARY FILE UPDATES: 15 JAN 2007 HIGHEST RN 917470-98-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

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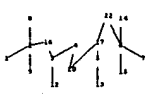

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chain bonds :
1-2 2-9 2-8 2-16 3-12 3-4 3-16 4-20 5-17 5-13 6-15 6-7 6-14 6-22
17-20 17-22
exact/norm bonds :
1-2 3-12 5-13 6-7
exact bonds :
2-9 2-8 2-16 3-4 3-16 4-20 5-17 6-15 6-14 6-22 17-20 17-22

G1:C,O

Hydrogen count :
4:>= minimum 2 8:>= minimum 3 9:>= minimum 3 20:>= minimum 2
Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 20:CLASS 22:CLASS

L5 STRUCTURE UPLOADED

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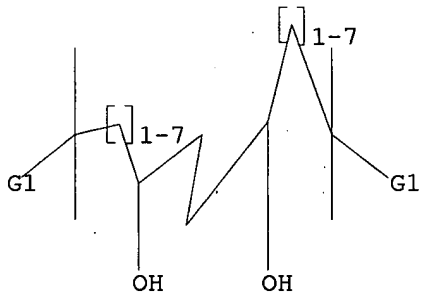
L5 HAS NO ANSWERS
L5 STR



G1 C,O

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 15906 TO ITERATE

12.6% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 310567 TO 325673
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> search l5 sss full
FULL SEARCH INITIATED 09:56:20 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 314006 TO ITERATE

100.0% PROCESSED 314006 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.03

L7 0 SEA SSS FUL L5

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.55	361.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-3.12

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 09:56:30 ON 16 JAN 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

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PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 10:12:17 ON 16 JAN 2007
FILE 'REGISTRY' ENTERED AT 10:12:17 ON 16 JAN 2007

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.55	361.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-3.12

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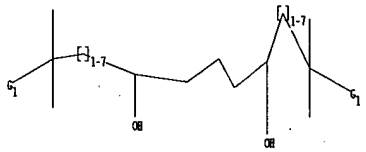
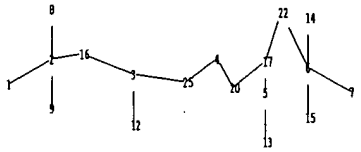




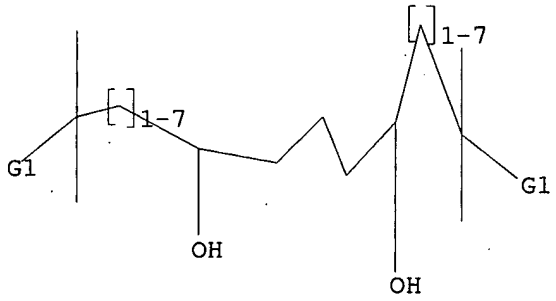
chain nodes :
1 2 3 4 5 6 7 8 9 12 13 14 15 16 17 20 22 25
chain bonds :
1-2 2-9 2-8 2-16 3-12 3-16 3-25 4-20 4-25 5-17 5-13 6-15 6-7 6-14 6-22 17-20 17-22
exact/norm bonds :
1-2 3-12 5-13 6-7
exact bonds :
2-9 2-8 2-16 3-16 3-25 4-20 4-25 5-17 6-15 6-14 6-22 17-20 17-22

G1:C,O

Hydrogen count :
4:>= minimum 2 8:>= minimum 3 9:>= minimum 3 20:>= minimum 2
Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 20:CLASS 22:CLASS 25:CLASS

L8 STRUCTURE UPLOADED

=> d l8
L8 HAS NO ANSWERS
L8 STR



G1 C,O

Structure attributes must be viewed using STN Express query preparation.

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ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:sam
SAMPLE SEARCH INITIATED 10:13:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    15830 TO ITERATE

 12.6% PROCESSED     2000 ITERATIONS                                0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       309065 TO   324135
PROJECTED ANSWERS:               0 TO        0

L9            0 SEA SSS SAM L8

=> search l8 sss full
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FULL SCREEN SEARCH COMPLETED -   312463 TO ITERATE

100.0% PROCESSED   312463 ITERATIONS                               0 ANSWERS
SEARCH TIME: 00.00.03

L10           0 SEA SSS FUL L8

=> logoff hold
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                              345.55     534.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                 ENTRY    SESSION
CA SUBSCRIBER PRICE                                0.00      -3.12

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:13:53 ON 16 JAN 2007
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